IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:

Kazutaka Habu, et al.

CASE NO.:

P98,1972

SERIAL NO:

09/066,851

GROUP ART UNIT:

742

FILING DATE:

April 28, 1998

EXAMINER:

S In

INVENTION:

"SOLDER MATERIAL"

INFORMATION DISCLOSURE STATEMENT TRANSMITTAL LETTER

Commissioner of Patents and Trademarks Washington, D.C. 20231

SIR:

Submitted herewith is an Information Disclosure Statement for consideration in the above-identified application. This Information Disclosure Statement is submitted:

- Within three months (1) of filing date of a national application; (2) of date of entry of the national stage as set forth in 37 C.F.R. §1.491 in an international application; or (3) before the mailing date of a first Office Action on the merits, whichever occurs last. (No fee is required.)
- [X] After the mailing date of a first Office Action but before (1) mailing of a final action under 37 C.F.R. §1.113; or (2) mailing of a notice of allowance under §1.311, whichever occurs first.

Payment of the fee set forth in 37 C.F.R. §1.17(p) accompanies this submission; or

[X] The certification specified in 37 C.F.R. §1.97(e) is made below. (No fee is required.)

- After the mailing of (1) a final action under 37 C.F.R. §1.113; or (2) notice of allowance under 37 C.F.R. §1.311 whichever occurs first, but before payment of the issue fee. The certification specified in 37 C.F.R. §1.97(e) is made below. The Commissioner hereby is petitioned to consider the Information Disclosure Statement accompanying this submission. Payment for the Petition fee set forth in 37 C.F.R. §1.17(i)(1) accompanies this submission.
- [X] The undersigned counsel for applicant(s) hereby certifies each item of information identified in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.
- The undersigned counsel for applicant(s) hereby certifies that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, or to the knowledge of the undersigned, after making reasonable inquiry, was known to any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the filing of the statement.

[] A check in the amount of \$_____ to cover any required fee is enclosed.

[X] The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Account No. 08-2290. A duplicate copy of this sheet is enclosed for this purpose.

Very respectfully,

HILL & SIMPSON

A Professional Corporation

Reg. No. 30,619)

John W. Cornell, Reg. No. 30,619

When phoning re this application, please call (312) 876-0200.

Hill & Simpson, P.C. Sears Tower, 85th Floor

Chicago, Illinois 60606

Telephone: (312) 876-0200

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C 20231 on February 1, 1999.

John W. Comell

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTORS: Kazutaka HABU; Naoko TAKEDA

ATTORNEY DOCKET NO.: 09792909-5360

SERIAL NO.: Not yet assigned

GROUP ART UNIT: Not yet assigned

FILED: Fel

February 8, 2002

EXAMINER:

Not yet assigned

TITLE: "METHOD TO MANUFACTURE LEAD-FREE SOLDER MATERIAL HAVING GOOD WETTABILITY" (as amended)

IDS REQUEST AND EXPLANATION OF RELEVANCE

Assistant Commissioner for Patents Washington, DC 20231

SIR:

In accordance with the provisions of 37 C.F.R. § 1.56, Applicant requests that citation and examination of the references identified on the attached form PTO/SB/08A-B, copies of which are enclosed herewith in accordance with 37 C.F.R. §1.98, be made during the course of examination of the above-referenced application for United States Letters Patent.

I. SUBMITTED U.S. PATENT DOCUMENTS

Number

Patentee Name

Publication Date

Not applicable

II. SUBMITTED FOREIGN PATENT DOCUMENTS

| Number | Patentee Name | Publication Date |
|--------------|---------------------------|------------------|
| JP 62-230493 | Masuzawa Masao, et al. | October 9, 1987 |
| JP 8-206874 | Yamaguchi Atsushi, et al. | August 13, 1996 |
| JP 10-6075 | Niha N | January 13, 1998 |

1

Parent Serial No. 08/965,980 Atty. Docket No. 09792909-5360

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Cust. No. 026263

| WO 92/17617 | KRONBERG, James W. | October 15, 1992 |
|----------------|-------------------------------|-------------------|
| EP 0 612 578A1 | Jin, Sungho, et al. | August 31, 1994 |
| EP 0 847 828A1 | Ogashiwa, Toshinori, et al. | June 17, 1998 |
| EP 0 710 521A1 | Ninomiya, Ryuji, et al. | May 8, 1996 |
| EP 0 639 426A1 | Kawaguchi, Toranosuke, et al. | February 22, 1995 |
| JP 09206983 | Haniyu Kazutaka | August 12, 1997 |

III. SUBMITTED NON-PATENT LITERATURE DOCUMENTS

Author Article Title Source Title Date Page(s) Vol./Issue Nos. Publisher Publishing Location

Seiki Sakuyama, et al. "Solderability of Solder-Coated Surfaces for SMT Printed Wiring Boards" Fujitu-Scientific and Technical Journal, vol. 29, no. 4, 21 December 1993, pages 357-366, XP000439110

Tetsuya Nakatsuka, et al. "Development of High Reliable Pb Free Solder," Production Engineering Research Laboratory, Hitachi, Ltd. Feb. 6-7, 1997, 3rd Symposium on "Microjoining Assembly Technology in Electronics"

IV. EXPLANATION OF RELEVANCE

The above items were made of record in the parent application, U.S. Serial No. 09/066,851, filed on April 28, 1998. Copies of the above items are submitted herewith.

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Attorney Customer Number: 026263

Phn: (312) 876-8000 Fax: (312) 876-7934 Respectfully Submitted

SONNENSCHEIN NATH & ROSENTHAL

Attorneys for Applicant

David R. Metzger

February 8, 2002



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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| | | | | Application Number | Not yet assigned | | |
| INFO | RMATIO | N DIS | CLOSURE | Filing Date | February 8, 2002 | | |
| STA | TEMENT | BY A | PPLICANT | First Named Inventor | Kazutaka HABU, et al. | | |
| | | | | Art Unit | Not yet assigned | | |
| (| use as many si | heets as | necessary) | Examiner Name | Not yet assigned | | |
| Sheet 1 of 2 | | | | Attorney Docket Number | 9792909-5360 | | |

| | U.S. PATENT DOCUMENTS | | | | | | | | |
|---|-----------------------|---|---|--|---|--|--|--|--|
| Examiner Initials | | Document Number Number - Kind Code ² (if known | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | | | | |
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| | | JP 62-230493 | | Masuzawa M. et | al. | 1 |
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| | | JP 10-6075 | | Niha, N. | | 1 |
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| | | EP 0 710521A1 | | Ninomiya, R., e | 1 | ~ |
| | | EP 0 639 426A1 | 02/22/95 | Kawaguchi, T., | et_a1 | ~ |
| | | JP_09206983 | 08/12/97 | Haniyu_Kazutaka | | V |

| 1 | Examiner | Date |
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English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.qov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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| Substitute f | or form 1449B/PTO | | | Complete if Kn wn | | | |
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| NEOE | NATION I | nic | CLOSURE | Application Number | Not vet assigned | | |
| | | | | Filing Date | February 8, 2002 | | |
| STAT | EMENT BY | / A | PPLICANT | First Named Inventor | Kazutaka HABU, et al. | | |
| | | • | | Group Art Unit | Not yet assigned | | |
| (use as many sheets as necessary) | | | | Examiner Name | Not yet assigned | | |
| Sheet | 2 | of | 2 | Attorney Docket Number | 9792909-5360 | | |

| ·, | | OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS | |
|---|---|---|----|
| Examiner Initials | Cite No.1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | - |
| | | Seiki Sakuyama, et al. "Solderability of Solder-Coated Surfaces for SMT Printed Wiring Boards" Fujitu-Scientifi and Technical Journal, vol. 29, no. 4, 21 December 1993, | c, |
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| | | on "Microjoining Assembly Technology in Electronics" | |
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Signature

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT Sheet 1 of Docket No. Serial No. P98,1072 09/066,85 Applicant Kazutaka Habu, et al. Filing Date Group Art Un April 28, 1998 1742 Filing Date Class Subclass If appropriate Translation Class Subclass Yes No X X OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.) Tetsuya Nakatsuka, et al., "Development of High Reliable Pb Free Solder", Production

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Japan

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Oct. 9, 1987

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Jan. 13, 1998

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JP 62-230493

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U.S. PATENT DOCUMENTS

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Sheet 1 of 1

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| | AE | EP 0 612 578 A1 | Aug 31 1994 | EP | | | X | |
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